

**Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services**

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**STATEMENT OF BASIS**

**SHARED SOURCES**

**AGENCY INTEREST NO. 26336**

**SHELL CHEMICAL LP, NORCO CHEMICAL PLANT – EAST SITE**

**NORCO, ST. CHARLES PARISH, LOUISIANA**

**Activity Number: PER20020001**

**Draft Permit 2510-V2**

**I. APPLICANT:**

**Company:**

Shell Chemical LP (Shell)  
15536 River Road, Norco, LA 70079

**Facility:**

Norco Chemical Plant  
Approximate Coordinates Latitude 30 deg., 4 sec. and Longitude 90 deg., 24 min.,  
25 sec. Zone 15.

**Permit Writer:**

Syed Quadri  
Office of Environmental Services, Permits Division

**II. FACILITY AND CURRENT PERMIT STATUS AND PROPOSED  
PERMIT INFORMATION:**

The Norco Chemical Plant – East Site is owned and operated by Shell Chemical LP (Shell). The facility is currently operating under a Part 70 Permit No. 2510-V1 dated July 21, 2000. Shell has gone through some changes at the management level and has sold some of the assets. This permit has equipment which are now owned by Motiva Norco Refining Company and Hexion Speciality Chemicals Inc.

This is a renewal Part 70 permit that will be issued to Shell which addresses and updates the existing emissions based on changes due to ownership changes, restructuring, and reconciliation based on updated EPA emissions factors.

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Several Part 70 permits addressing portions of the facility have already been issued. These include:

<u>Permit #</u>	<u>Units or Sources</u>	<u>Date Issued</u>
2510-V1	Shared Sources	7/21/2000
2520-V2	Olefins Units	10/23/2001
2283-V0	Boilers East	10/28/2005

**Permitted Air Emissions**

Permitted emissions from the Shell Norco Chemical Plant- East Site in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change*</u>
PM <sub>10</sub>	4.03	5.71	+ 1.68
SO <sub>2</sub>	15.13	56.30	+ 41.17
NO <sub>x</sub>	175.53	37.23	- 138.30
CO	12.82	137.80	+ 124.98
VOC	587.73	259.75	- 327.98

\* Increase in emissions are due to ownership changes, restructuring, and reconciliation based on updated EPA emission factors and updated operating data.

**Prevention of Significant Deterioration Applicability**

Prevention of Significant Deterioration (PSD) review is not required as there is no modification undertaken at the facility.

This application was reviewed for compliance with the Louisiana Part 70 operating permit program, Louisiana Air Quality Regulations, Louisiana Comprehensive TAP Emission Control Program, NSPS, and NESHAP. PSD regulations do not apply.

**General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

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**Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

**III. Permit Shields**

No permit shields are being granted at this time.

**IV. Periodic Monitoring**

The facility shall route the vents from Emission Points S-412, S-417, to the Fract Plant Ground Flare, Emission Point 1-84 or to North Property Elevated Flare, Emission Point 3-93, and Tank XC430 to Utilities Flare, Emission Point 3-84 to show compliance with the requirements of Compliance Assurance Monitoring under 40 CFR 64. The North Property Elevated Flare and the Fract Plant Ground Flare are owned by Enterprise Products and are permitted under Part 70 Permit No. 2429-V0 issued in June 1998.

<b>V. Applicability and Exemptions of Selected Subject Items<sup>1</sup></b>	
The facility is exempt from NESHAP, 40 CFR 63, Subpart GGGGG – National Emission Standards for Hazardous Pollutants – Site Remediation as the HAPs are less than 1 Mg/yr from remediation. The facility shall keep records to show exemption status.	

<b>VI. Streamlined Requirements</b>			
<b>Unit or Plant Site</b>	<b>Programs Being Streamlined</b>	<b>Stream Applicability</b>	<b>Overall Most Stringent Program</b>
NA			

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**VII GLOSSARY**

**Carbon Monoxide (CO)** – A colorless, odorless gas which is an oxide of carbon.

**Maximum Achievable Control Technology (MACT)** - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

**New Source Review (NSR)** - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

**Nitrogen Oxides (NO<sub>x</sub>)** - Compounds whose molecules consists of nitrogen and oxygen.

**Organic Compound** - Any compound of carbon and another element. Examples: Methane (CH<sub>4</sub>), Ethane (C<sub>2</sub>H<sub>6</sub>), Carbon Disulfide (CS<sub>2</sub>)

**Part 70 Operating Permit**- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq 10$  tons per year of any toxic air pollutant;  $\geq 25$  tons of total toxic air pollutants; and  $\geq 100$  tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

**PM<sub>10</sub>**- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

**Potential to Emit (PTE)** - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

**Prevention of Significant Deterioration (PSD)** – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

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**RMACT** – Refinery Maximum Achievable Control Technology

**Sulfur Dioxide (SO<sub>2</sub>)** – An oxide of sulfur.

**Title V permit** – See Part 70 Operating Permit.

**Volatile Organic Compound (VOC)** - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.